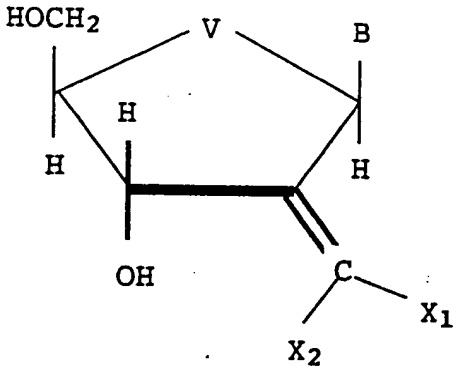
WHAT IS CLAIMED IS:

1. A method of treating a patient suffering from a neoplastic disease state comprising administering to said patient an effective antineoplastic amount of a 2'-halomethylidene derivative of the formula (1)



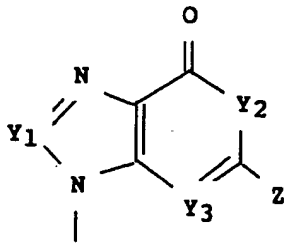
(1)

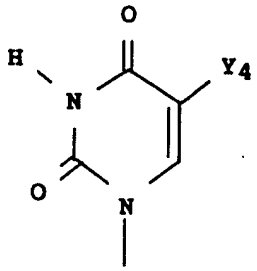
wherein

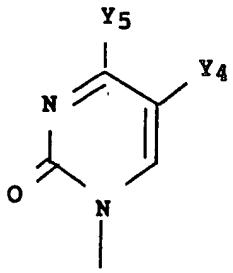
V is oxy, methylene, or thio,

X_1 and X_2 are each independently hydrogen or halogen, with the proviso that at least one of X_1 and X_2 is halogen,

B is a radical of the formula







wherein Y_1 is nitrogen, a CH group, a CCl group, a CBr group or a CNH_2 group; Y_2 and Y_3 are each independently nitrogen or a CH group; Y_4 is hydrogen, C_1-C_4 alkyl, C_1-C_4 alkoxy or halogen; Y_5 is amino or C_1-C_4 alkoxy; and Z is hydrogen, halogen, or NH_2;

or a pharmaceutically acceptable salt thereof in conjunctive therapy with an effective antineoplastic amount of a S-phase or M-phase specific agent.

2. A method according to Claim 1 wherein the 2'-halomethylidene derivative of the formula (1) is (E)-2'-deoxy-2'-fluoromethylidenecytidine.

3. A method according to Claim 1 wherein the S-phase specific agent is cytarabine.

4. A method according to Claim 1 wherein the S-phase specific agent is fluorouracil.

5. A method according to Claim 1 wherein the M-phase specific agent is vinblastine.

6. A method according to Claim 1 wherein the neoplastic disease state is a leukemia.

7. A method according to Claim 1 wherein the neoplastic disease state is a carcinoma.

8. A method according to Claim 2 wherein the S-phase specific agent is cytarabine.

9. A method according to Claim 2 wherein the S-phase specific agent is fluorouracil.

10. A method according to Claim 2 wherein the M-phase specific agent is vinblastine.

11. A method according to Claim 2 wherein the neoplastic disease state is a leukemia.

12. A method according to Claim 2 wherein the neoplastic disease state is a carcinoma.